DATA ITEM DESCRIPTION

Title: RELIABILITY-CENTERED MAINTENANCE (RCM) ADDITIONAL FUNCTIONALLY SIGNIFICANT ITEM (AFSI) SELECTION REPORT

Number: DI-PSSS-82030 AMSC Number: N9632 DTIC Applicable: N/A Preparing Activity: SH Applicable Forms: N/A Approval Date: 20160129 Limitation: N/A GIDEP Applicable: N/A Project Number: PSSS-2015-019

Use/Relationship:

The Reliability-Centered Maintenance (RCM) Additional Functionally Significant Item (AFSI) Index Selection Report defines items considered to be candidates for separate analysis because of their importance and complexity.

This Data Item Description (DID) contains the format, content, preparation instructions and intended use information for the data product resulting from the work task described in 5.1.3 of MIL-STD-3034A.

This DID is related to DI-PSSS-80979B, RCM Master Systems and Subsystems Index (MSSI); DI-PSSS-80994B, RCM Functional Block Diagram (FBD); DI-PSSS-80981B, RCM Functional Failure Analysis (FFA) Report; DI-PSSS-80982B, RCM Functionally Significant Items (FSI) Index; DI-PSSS-80980B, RCM Failure Modes and Effects Analysis (FMEA) Report; DI-PSSS-80984B, RCM Decision Logic Tree Analysis (LTA) with Supporting Rationale and Justification Report; DI-PSSS-80985B, RCM Servicing and Lubrication Analysis (SLA) Report; DI-PSSS-80989B, RCM Inactive Equipment Maintenance (IEM) Requirement Analysis Report; DI-PSSS-81829A, RCM Corrective Maintenance (CM) Development Report; DI-PSSS-80986B, RCM Maintenance Requirements Index (MRI); DI-PSSS-80988B, RCM Task Definition Report; DI-PSSS-80987B, RCM Procedure Validation Report; DI-PSSS-80990A, RCM Documentation Control Sheet.

This DID supersedes DI-SESS-80983A.

Requirements:

1. <u>Reference Documents</u>. The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be as specified in the contract.

2. <u>Format</u>. The AFSI selection report shall be in a format similar to that of the sample form of Figure 1 of this DID.

3. <u>Content</u>. The AFSI selection report shall contain all of the information specified in the sample form of Figure 1 of this DID and as specified in MIL-STD-3034A, paragraph 5.1.3.5.

3.1 <u>Block 1. ESWBS number.</u> Enter the Expanded Ship Work Breakdown Structure (ESWBS) number for the Functionally Significant Item (FSI) candidate. If the candidate is below level 4 and does not have a unique ESWBS number, add a suffix to the level 4 ESWBS number and use this throughout the analysis.

3.2 <u>Block 2. Nomenclature AFSI candidate</u>. Enter the nomenclature of the AFSI candidate.

3.3 <u>Block 3. Ship Class</u>. Enter the ship class and hull number on which the RCM analysis is based.

3.4 <u>Block 4. Prepared by</u>. Enter the analyst's name and the date.

3.5 <u>Block 5. Reviewed by</u>. Enter the first level reviewer's name and the date.

3.6 <u>Block 6. Approved by</u>. Reserved for the Maintenance Coordinating Activity (MCA) approval signature and date.

3.7 <u>Block 7. Revision</u>. Identify the revision level of the AFSI selection report and enter e.g. "ORIGINAL", "A", "B", "C", etc. sequentially as applicable and the date.

3.8 <u>Block 8. Description</u>. Enter a brief functional description of this item keyed to its maintenance needs and provisions for maintenance.

3.8.1 The report shall identify any redundancies. If no redundancy exists, enter "NONE".

3.8.2 The report shall identify the in and out interfaces, sources of input, critical values and the ESWBS number for each source. If there are no interfaces, enter "NONE".

3.8.3 The report shall identify all Built In Test Equipment (BITE). If there is no BITE, enter "NONE".

3.8.4 The report shall identify any regulations, e.g. EPA, OSHA, etc., requiring the performance of maintenance and any regulations which may be violated if a failure occurs. If no regulations are impacted, enter "NONE".

3.8.5 The report shall identify condition indicators and shall include the following for each indicator:

(1) Type. Enter gage, thermometer, meter, indicator light, audible and visual alarm, as applicable.

(2) Indicates. Identify what the indicator tells about the system.

(3) To whom. Identify the watch station and the title of the operator who is observing the indicator.

3.9 <u>Block 9. Location</u>. Enter the compartment numbers of spaces where this item is located.

3.10 <u>Block 10. Quantity</u>. Enter the quantity of items installed in this system.

3.11 <u>Block 11. Function(s)</u>. Enter a description of the functions of each item. Include safety, regulatory, and protective features, out interfaces, and all co-functions.

3.11.1 The report shall identify the function minimum operational parameters and performance standards, as applicable. Each function shall be sequentially numbered, e.g. 1.0, 2.0, 3.0, etc.

3.11.2 Enter in block 11a "YES" when the functions impact one or more of the following, safety, mobility and mission, enter "NO" when they do not.

3.12 <u>Block 12. Functional Failures</u>. Identify the functional failure(s) for each of the functions listed in block 11.

3.12.1 Each function shall be numbered, e.g. 1.1, 1.2, 1.3; 2.1, 2.2, and 2.3 corresponding to the applicable function.

3.12.2 Enter in the Impact column, block 12A "YES" when any of these failures have a direct adverse impact on safety and enter "NO" when they do not.

3.13 <u>Block 13. Reliability</u>. Enter data for estimated corrective maintenance rate as specified in MIL-STD-3034A, paragraph 5.1.3.5.

3.13.1 Identify source of data, e.g. comparable equipment platform, original equipment manufacturer and industrial database.

3.13.2 Enter in the Impact column, block 13A "YES" if the estimated corrective maintenance rate is greater than one per year and "NO" if it is not.

3.14 <u>Block 14. Cost</u>. Under the Impact column block 14A, enter "YES" if this item's purchase cost greater than \$5,000 and "NO" if it is not.

3.15 <u>Block 15. Master FSI Index Transfer</u>. If there is a "YES" in the Impact column for any block (11A through 14A), enter "YES".

3.16 <u>Block 16. Serial Number</u>. Enter a four-segment serial number as follows:

a. Segment 1 - Enter the developing organization abbreviation followed by a slant (/).

b. Segment 2 – For developers, enter the development authorization number followed by a slant (/); for other development activities, assign a development number followed by a slant (/).

c. Segment 3 - Enter the number 117, indicating the AFSI selection form, followed by a slant (/).

d. Segment 4 - Enter the ESWBS number from block 1.

End of DI-PSSS-82030

1. ESWBS NUMBER	SWBS NUMBER 2. NOMENCLATURE FSI CANDIDATE				3. SHIP CLASS	S	Н	OF
(00504050 0)(7.051/01011			
4. PREPARED BY		5. REVIEWED BY	6. APPROVED BY		7. REVISION			
DATE		DATE	DATE		DATE			
8. DESCRIPTION					9. LOCATION			
							Γ	10. QTY
							Γ	
11 FUNCTIONS					ſ	11A	IMP	ACT?
						1174.	(Y/N	I)
ARE ANY OF THESE FUNCTIONS NECESSARY FOR SAFETY, MOBILITY, OR MISSION?								
12. FUNCTIONAL FA	AILURES					12A.	IMP/ (Y/N	ACT?
					t the second sec		<u> </u>	/
	DO ANY (OF THESE FAILURES HAVE A	DIRECT ADVERSE IMPACT ON	I SAFETY?				
13. RELIABILITY						13A.	IMP	ACT?
							(1/N	IJ
1:	S THE ESTIN	ATED CORRECTIVE MAINTE	NANCE RATE GREATER THAN	1 PER YEAR?	ſ			
14 COST						144	IMP	ACT?
						1.0.0	(Y/N	I)
					ſ			
15. MASTER ESLING	DEX TRANSF	ER? (Y/N)	USI GREATER THAN \$5000?	16. SERIAL NUM	BER			
		\						
L				DNAL FUNCTION	ALLY SIGNIFICAN		S SFI	LECTION

SAMPLE FORM - FIGURE 1 - ADDITIONAL FUNCTIONALLY SIGNIFICANT ITEM SELECTION